

IN THE CLAIMS:

Please amend claims 17, 22, 26- 29, 31-33, 35, 36, 38 and 39 as follows. Please cancel claim 34 without prejudice and add new claim 40.

Claims 1-16 (Canceled).

17. (Currently Amended) A method for restoring a subscriber context in a mobile communication network which comprises at least a ~~first~~ serving GPRS node (SGSN) and a Gateway GPRS Support Node (GGSN) ~~second network element~~, the GGSN ~~second network element~~ storing a plurality of subscriber contexts related to the SGSN ~~first network element~~, comprising the steps of:

storing restart information for the SGSN ~~first network element~~ at the GGSN ~~second network element~~;

receiving a message at the GGSN ~~second network element~~ from the SGSN ~~first network element~~, the message including restart information indicating whether the SGSN ~~first network element~~ has been restarted and whether a subscriber context has been updated in the SGSN ~~first network element~~ after the latest restart;

creating a response to the message at the GGSN ~~second network element~~, wherein the response includes restart information indicating whether the GGSN ~~second network element~~ has been restarted;

transmitting the response to the SGSN ~~first network element~~ from the GGSN ~~second network element~~;

comparing the restart information of the message received in the receiving step with the stored restart information stored for the SGSN ~~first network element~~ at the GGSN ~~second network element~~; and

inactivating all subscriber contexts which are stored in the GGSN ~~second network element~~ for use of the SGSN ~~first network element~~ and have been updated before the latest restart of the SGSN ~~first network element~~ when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN ~~first network element~~.

18. (Previously Presented) A method according to claim 17, wherein said restart information comprises a restart counter value and is transmitted together with a context signaling message.

19. (Previously Presented) A method according to claim 18, wherein said restart counter value is compared with a stored restart counter value so as to determine said subscriber context updated before the latest restart.

20. (Previously Presented) A method according to claim 19, wherein said stored restart counter value is updated on the basis of said transmitted restart counter value.

21. (Previously Presented) A method according to claim 17, wherein said restart

information is transmitted only one time after said latest restart.

22. (Currently Amended) A method according to claim 17, ~~wherein at least one of said network elements comprises a GPRS support node, and~~ wherein said restart information is transmitted together with a tunnel management signaling message.

23. (Previously Presented) A method according to claim 22, wherein said subscriber context is a PDP context.

24. (Previously Presented) A method according to claim 17, wherein said restart information is transmitted separately or in a separate message.

25. (Previously Presented) A method according to claim 24, wherein said restart information comprises a restart counter value.

26. (Previously Presented) A system for restoring a subscriber context in a network element of a communication network which comprises at least a Serving GPRS Support Node (SGSN) ~~first~~ and a Gateway GPRS Support Node (GGSN) ~~second network element~~, the GGSN ~~second network element~~ storing a plurality of subscriber contexts related to the SGSN ~~first network element~~, comprising:

storing means for storing restart information for the SGSN ~~first network element~~ at

the GGSN ~~second network element~~;

first receiving means for receiving a message at the GGSN ~~second network element~~ from the SGSN ~~first network element~~, the message including restart information indicating whether the SGSN ~~first network element~~ has been restarted and whether a subscriber context has been updated in the SGSN ~~first network element~~ after the latest restart;

control means for continuing the use of a subscriber context updated after said latest restart and for inactivation of the plurality of subscriber contexts which are stored in the GGSN ~~second network element~~ related to the SGSN ~~first network element~~ and have been updated before said latest restart, in response to said restart information; and

transmitting means for transmitting a restart information from the second network element to the first network element, including a restart counter for counting a restart number and adding means for adding said restart number to a subscriber context message.

27. (Currently Amended) A system according to claim 26, wherein said GGSN ~~second network element~~ comprises comparing means for comparing said restart number received with a restart number stored in a storing means and for supplying the comparing result to said control means.

28. (Currently Amended) A system according to claim 26, wherein said control means performs control so as to store a new subscriber context included in said

subscriber context message and to delete an old subscriber context stored in said GGSN
~~second_network_element~~.

29. (Currently Amended) A system according to claim 26, wherein said transmitting means comprises a restart counter for counting a restart number, and switching means for switching said restart number to said transmitting means so as to be transmitted separately or in a separate message to said SGSN ~~first_network_element~~, and wherein said control means is arranged to delete or inactivate corresponding subscriber contexts received before the latest restart.

30. (Previously Presented) A system according to claim 26, wherein at least one of said network elements is a GPRS support node and wherein said subscriber context is a PDP context.

31. (Currently Amended) A Serving GPRS Support Node (SGSN) ~~network element~~ for a mobile communication network, comprising:

transmitting means for transmitting restart information from the SGSN ~~network element~~ to a Gateway GPRS Support Node (GGSN) ~~another network element~~, the restart information indicating whether the SGSN ~~network element~~ has been restarted and whether a subscriber context has been updated in the SGSN ~~network element~~ after the latest restart; and

receiving means for receiving restart information from the GGSN ~~another network element~~, the restart information indicating whether the GGSN ~~another network element~~ has been restarted and whether a received subscriber context has been updated in the GGSN ~~another network element~~ after the latest restart; - and

control means for continuing use of the received subscriber context updated after said latest restart and for inactivating a plurality of subscriber contexts stored in the SGSN for use by the GGSN and having been updated before said latest restart in response to said restart information when the restart information of the message received in the receiving step differs from the restart information stored for the GGSN.

32. (Currently Amended) A An SGSN ~~network element~~ according to claim 31, further comprising a restart counter for counting a restart number, and adding means for adding said restart number to a subscriber context message.

33. (Currently Amended) A An SGSN ~~network element~~ according to claim 31, further comprising a restart counter for counting a restart number, and switching means for switching said restart number to said transmitting means so as to be transmitted separately or in a separate message.

34. (Cancelled)

35. (Currently Amended) An SGSN ~~network element~~ according to claim 34 31, wherein said restart information comprises a restart number and wherein said ~~network element~~ SGSN comprises comparing means for comparing said restart number with a restart number stored in a storing means and for supplying the comparing result to said control means.

36. (Currently Amended) An SGSN ~~network element~~ according to claim 31, ~~wherein said network element is a GPRS support node and~~ wherein said subscriber context is a PDP context.

37. (Previously Presented) The method of claim 17, wherein the message received in the receiving step comprises a subscriber context create message.

38. (Currently Amended) The method of claim 37, further comprising creating, as the response to the message, a subscriber context at the GGSN ~~second network element~~ and

transmitting a subscriber context response to the SGSN ~~first network element~~, wherein the subscriber context response includes the restart information indicating whether the GGSN ~~second network element~~ has been restarted.

39. (Currently Amended) A method for restoring a subscriber context in a mobile communication network that includes at least a Serving GPRS Support Node (SGSN) ~~first network element~~ and a Gateway GPRS Support Node (GGSN) ~~second network element~~, the SGSN ~~first network element~~ storing a plurality of subscriber contexts for use of the GGSN ~~second network element~~, and the GGSN ~~second network element~~ storing a plurality of subscriber contexts for use of the SGSN ~~first network element~~, the method comprising the steps of:

storing, at the SGSN ~~first network element~~, restart information for the GGSN ~~second network element~~ indicating whether the GGSN ~~second network element~~ has been restarted;

receiving a message from the GGSN ~~second network element~~ at the SGSN ~~first network element~~, wherein the message includes restart information;

comparing, at the SGSN ~~first network element~~, the restart information of the message with the restart information stored for the GGSN ~~second network element~~; and

inactivating all subscriber contexts that are stored in the SGSN ~~first network element~~ for use of the GGSN ~~second network element~~ except those subscriber contexts for use of the GGSN ~~second network element~~ that have been updated after the latest restart of the GGSN ~~second network element~~ when the restart information of the message received in the receiving step differs from the restart information stored for the GGSN ~~second network element~~.

40. (New) A Gateway GPRS Support Node (GGSN), for a mobile communication network, comprising:

transmitting means for transmitting restart information from the GGSN to a Serving GPRS Support Node (SGSN), the restart information indicating whether the GGSN has been restarted and whether a subscriber context has been updated in the GGSN after the latest restart;

receiving means for receiving restart information from the SGSN, the restart information indicating whether the SGSN has been restarted and whether a received subscriber context has been updated in the SGSN after the latest restart;

means for inactivating all subscriber contexts which are stored in the GGSN for use by the SGSN and have been updated before the latest restart of the SGSN when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN; and

control means for continuing use of the received subscriber context updated after said latest restart and for inactivating a plurality of subscriber contexts stored in the GGSN for use by the SGSN and having been updated before said latest restart in response to said restart information when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN.